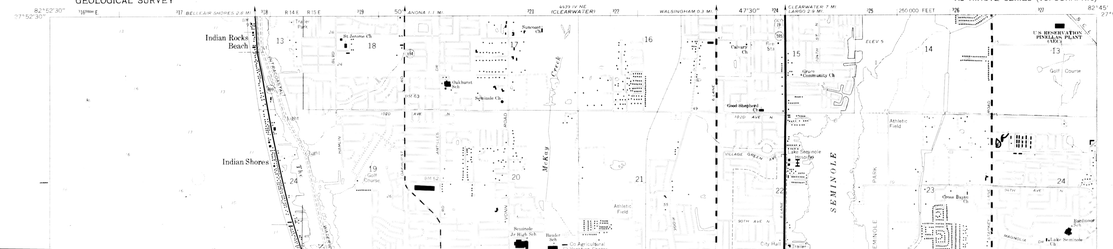
TM 89/2:85/(5)map A2

I49.89/2:85(15)mapA2

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF FLORIDA

SEMINOLE QUADRANGLE
FLORIDA--PINELLAS CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

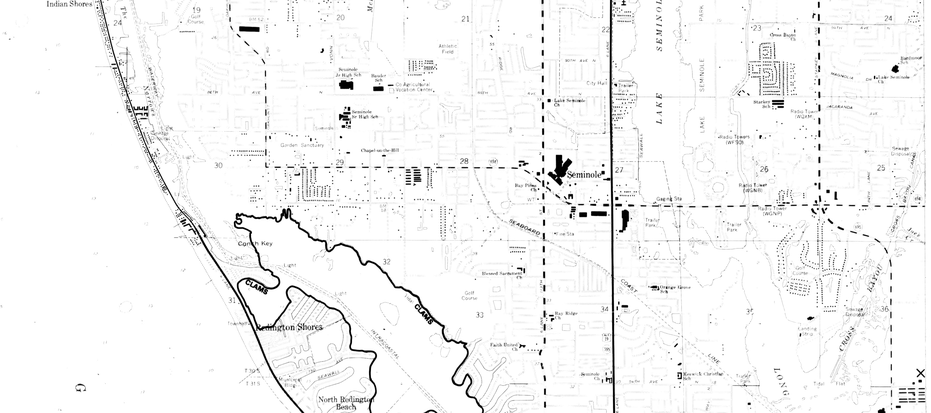


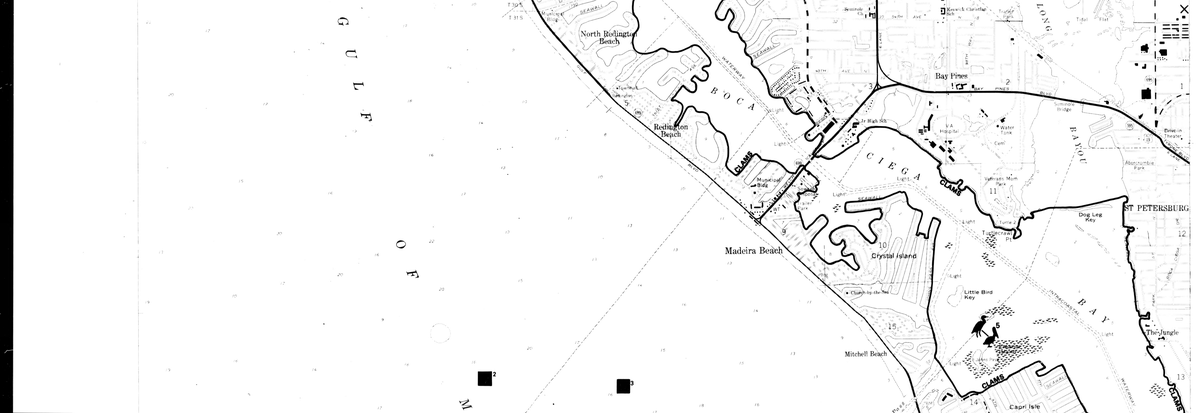

MAP A2

# TAMPA BAY ENVIRONMENTAL ATLAS

## BIOLOGICAL RESOURCES

### SEMINOLE


Indian Shores
Seminole
Redington Shores
North Redington Beach
LAKE SEMINOLE
CLARK
CLARK
Corbett Key
SEABOARD
SEABOARD
Golf Course
Cemetery
Cemetery
Cemetery




Transverse Mercator
10,000-foot grid ticks based on Florida coordinate system, east and west zones

Overlay material compiled in 1984 from latest available data obtained from Federal, State and Local government agencies and other sources.

There are no maps A19, A20, A21 due to a lack of data.

## LEGEND

**SHELLFISH HARVEST AREA**
(Florida Dept. of Natural Resources)

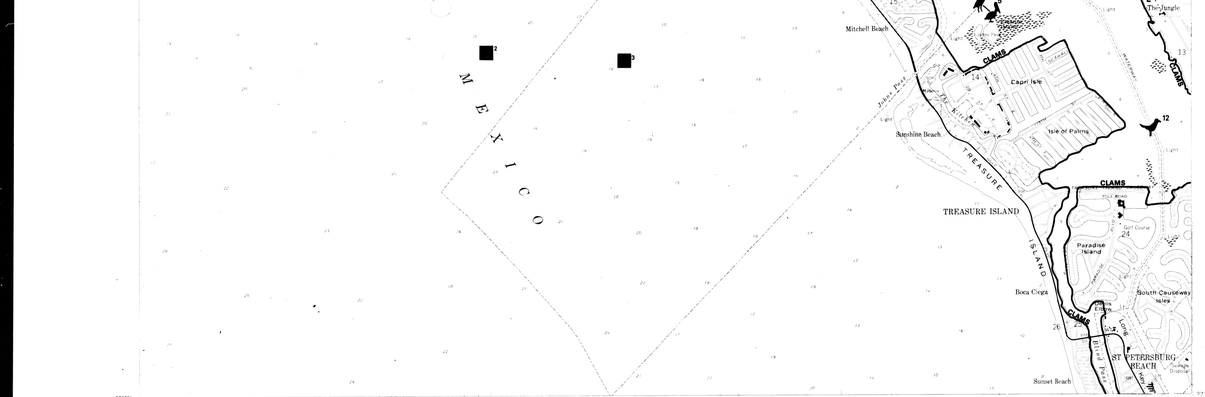
- **SHA** — Shellfish Harvest Approved
- **SHCA** — Shellfish Harvest Conditionally Approved

NOTE: Due to Dept. of Natural Resources (DNR) water quality standards all other estuarine areas are prohibited or unclassified shellfish harvest status and are closed to harvesting. For further info. on status of harvest areas contact DNR - Shellfish Environmental Assessment Section.

- **Oys-1** — Public Oyster Bed
- **Oys-2** — Private Oyster Bed (Lease)
- **CLAMS** — Clam Bed

**FINFISH SPAWNING, NURSERY AND HARVEST AREAS**
(Recreational Hook and Line Fishing)

| SPECIES # | FINFISH CATEGORY Common Name | SPAWNING LOCATION | SPAWNING SEASON J F M A M J J A S O N D | NURSERY AREA | MAJOR NURSERY HABITATS: Mangrove, Seagrass, Estuarine Bay, Oyster Bar/Reef, Tidal Flat, Live Bottom, Artificial Reef | HARVEST AREA | MAJOR ADULT HABITATS: Mangrove, Seagrass, Estuarine Bay, Oyster Bar/Reef, Tidal Flat, Live Bottom, Artificial Reef | MIGRATION TYPE |
|---|---|---|---|---|---|---|---|---|
| | ESTUARINE DEPENDENT FISHES | | | | | | | |
| 1 | Red Drum | | | | | | | |




SCALE 1:24000

## FINFISH SPAWNING, NURSERY AND HARVEST AREAS
(Recreational Hook and Line Fishing)

| SPECIES | FINFISH CATEGORY / Common Name | SPAWNING LOCATION | SPAWNING SEASON | NURSERY AREA | MAJOR NURSERY HABITATS: Seagrass | Estuarine Bay | Coral Reef | Live Bottom | Open Water | MAJOR ADULT HABITATS: Seagrass | Estuarine Bay | Coral Reef | Live Bottom | Open Water | MIGRATION TYPE* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ESTUARINE DEPENDENT FISHES** | | | | | | | | | | | | | | |
| 1 | Red Drum | C | M J J A S O | E | ● | ● | | | | E | ● | ● | | | 2 |
| 2 | Spotted Seatrout | E | M A M J J A | E | ● | ● | | | | E | ● | ● | | | 2 |
| 3 | Snook | C | M J J A S | E | ● | ● | | | | E | ● | ● | | | 2 |
| 4 | Steenbeed | C | M J J A S | C-E | ● | | | | | C-E | | | ● | ● | 1 |
| 5 | Southern Flounder | C | M J J A S O | C-E | ● | | | ● | | C-E | ● | | ● | | 2 |
| 6 | Florida Pompano | CS | M J J A S O | C-E | ● | | | ● | | C-E | | | ● | | 2 |
| 7 | Striped Mullet | CS | M J J A S O | E | ● | ● | ● | | | E | ● | ● | ● | | 2 |
| 8 | Gulf Menhaden | C | M J J A S O | E | ● | ● | ● | | | C-E | ● | ● | ● | | 2 |
| 9 | Spanish Sardine | C | M J J A S O | E | ● | ● | ● | | | C-E | ● | ● | ● | | 2 |
| 10 | Black Drum | C | M J J A S O | E | ● | ● | ● | | | E | ● | ● | ● | | 2 |
| | **REEF FISHES** | | | | | | | | | | | | | | |
| 11 | Red Grouper | CS | M J J A S O | CS-C | | | ● | ● | | CS | | | ● | ● | 2 |
| 12 | Jewfish | CS | M J J A S O | CS-C | | | ● | ● | | CS-C | | | ● | ● | 2 |
| 13 | Gag Grouper | CS | M J J A S O | CS-C | | | ● | ● | | CS-C | | | ● | ● | 2 |
| 14 | Scamp | CS | M J J A S O | CS | | | ● | ● | | CS | | | ● | ● | 2 |
| 15 | Red Snapper | CS | M J J A S O | CS-C | | | ● | ● | | CS-C | | | ● | ● | 2 |
| 16 | Mangrove Snapper | CS | M J J A S O | C-E | ● | ● | ● | | | C-E | | | ● | ● | 2 |
| | **COASTAL PELAGIC FISHES** | | | | | | | | | | | | | | |
| 17 | King Mackerel | OCS | M J J A S O | CS | | | | | | CS-C | | | ● | ● | 4 |
| 18 | Spanish Mackerel | CS | M J J A S O | CS | | | | | | CS-C | | | ● | ● | 4 |

*KEY:
E — Estuarine
C — Coastal
CS — Continental Shelf
OCS — Outer Continental Shelf

*MIGRATION TYPE:
1 — Residentially Restricted
2 — Random Residential Range
3 — Restricted Migration
4 — Extensive Migration

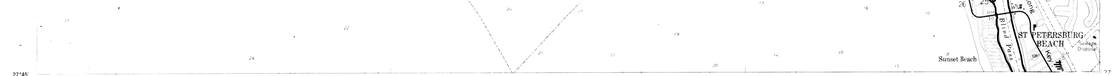
COLONIAL BIRD NESTING SITE *
Number appearing with symbol indicates colony sites. Colony sites and species composition data are included in the narrative.

Shorebird

Wading Bird

Brown Pelican

WEST INDIAN MANATEE HABITAT




SCALE 1:24 000

1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER

THE TAMPA BAY ENVIRONMENTAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE SERVICE, DIVISION OF BIOLOGICAL SERVICES NATIONAL COASTAL ECOSYSTEMS TEAM (FWS/OBS) FOR COASTAL PLANNERS, DECISION MAKERS AND THE GENERAL PUBLIC, TO DETERMINE AND EVALUATE CHANGE AND TO RESOLVE CONFLICTS AMONG LAND USES, FISH AND WILDLIFE REQUIREMENTS, AND HUMAN ACTIVITIES. THE ATLAS COVERS THE TAMPA BAY ESTUARY AND ADJACENT A MAJOR PORTION OF THE COASTAL COUNTIES OF PINELLAS, HILLSBOROUGH, MANATEE, AND A SMALL PORTION OF SARASOTA. THERE IS NO ATTEMPT, IN THE DESIGN OR PRODUCTS OF THIS STUDY, TO DEFINE THE LIMITS OF PROPRIETARY JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL GOVERNMENT TO ESTABLISH THE GEOGRAPHICAL SCOPE OF THE REGULATORY PROGRAMS OF GOVERNMENT AGENCIES.

THIS MAP HAS BEEN COMPILED FROM A VARIETY OF SOURCE MATERIALS INCLUDING MAPS, AERIAL PHOTOS, AND REPORTS, SINCE MANY SOURCES CONTAINED GENERALIZED LOCATIONS OF RESOURCES AND OTHER MAPPED FEATURES, THE USER SHOULD NOT RELY ON THESE MAPS FOR PRECISE MEASUREMENTS OF DISTANCES OR AREAS.

**PRIMARY SOURCES OF MAPPED INFORMATION:**

**SHELLFISH HARVEST AREAS:** Shellfish Harvest Area Maps. Dept. of Natural Resources, 1982

**PUBLIC & PRIVATE OYSTER BEDS:** Cooperative Gulf of Mexico Estuarine Inventory and Study, Florida: McNulty, Lindall and Sykes, 1972

**CLAMS:** Personal Communication. Discussion of Distribution Clams in Tampa Bay and Adjacent Brackish Waters. Mr. L. Trieu Thries T's Clam Company, 1983 Mike Sprague. Draft Maps. Department of Natural Resources, 1984

**SCALLOP BEDS:** Personal Communication. Mr. Bill Lyons Dept. of Natural Resources, Marine Research Laboratory, 1982

**FINFISH SPAWNING, NURSERY & HARVEST AREAS:** Florida's Fishing Grounds, Mss. 1970

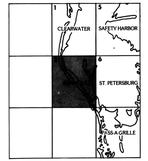
**BIRD NESTING SITES:** Florida Atlas of Breeding Sites for Herons and Their Allies: 1976-79, Nesbit, S.A., Ogden, J.C. Kale II, H.W. et al. U.S. Fish and Wildlife Service, 1982 Personal Communication, Maps and Data. Dr. H.W. Kale II. Florida Audubon Society, 1982

**MANATEE HABITAT:** Boaters guide to Manatees, the gentle giants. Florida Marine Patrol, 1980.

**SEAGRASS BEDS:** Tampa Bay Seagrass Maps, 1:10,000 and 1:24,000 Scales, Mangrove System, Inc. 1980 National Wetlands Inventory Maps, 1:24,000 Scale. U.S. Fish and Wildlife Service, 1983

**ARTIFICIAL REEFS:** Computer Printout of Florida Artificial Reefs. U.S. Army Corps of Engineers, 1981. Recreational Use Reefs in Florida: Artificial and Natural, Florida Sea Grant Program, 1979.

**FOR COMPLETE REFERENCE SEE MAP NARRATIVE**




- Colony Site. Colony size and species composition data are included in the narrative.
- Shorebird
- Wading Bird
- Brown Pelican
- WEST INDIAN MANATEE HABITAT
- STATE MANATEE SANCTUARY
- SEAGRASS BEDS
- ARTIFICIAL REEF.* (Permitted by Florida Dept. of Environmental Regulation) Numbers next to reefs refer to composition data in narrative

*Symbols appearing with numbers are described more fully in the narrative.

MICROFILMED FROM BEST AVAILABLE COPY

MICROCOPY RESOLUTION TEST CHART
1.0
1.1
1.25
1.4
1.6


MICROCOPY RESOLUTION TEST CHART
1.0
1.1
1.25
1.4
1.6